

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1-6. (canceled)

7. (Currently Amended) A method of recording a sequence of first and second video frames~~digital data~~, comprising:

providing a memory having a plurality of memory locations corresponding to a plurality of memory addresses;

using a linked list to determine different first and second sets of contiguous ones of the memory addresses;

selecting one of the sets of memory addresses;

creating first and second variable sized compressed frames from the first and second video frames, respectively;

writing the compressed frames to first and second ones of the memory locations,

respectively, corresponding to first and second memory addresses of the selected set;

using an index to store each of the first and second memory addresses; and different addresses of the memory for each of a plurality of sequential frames of the data recorded in a digital format;

retrieving the second video frame by obtaining the second memory address from the index, and decompressing the compressed frame stored at the second memory location. at least a portion of the data by accessing the memory addresses from the index;

looping the memory automatically by overwriting a portion of at least one of (a) the data and (b) the memory addresses; and

providing a loop remnant directory to determine a changing deallocation point.

8. (currently amended) The method of recording of claim 7, wherein the index identifies individual ones of the plurality of the first and second compressed frames using at least one of frame number, time, and date.

9. (currently amended) The method of recording of claim 7, wherein the different address to which the first compressed frame is written is a start address for a video clip. addresses are start addresses.

10. (currently amended) The method of recording of claim 7, wherein the step of selecting one of the sets of memory addresses comprises selecting a largest one of the sets. further comprising storing individual ones of the plurality of sequential frames in a digital format.

11. (currently amended) The method of recording of claim 7, wherein the index comprises a table stored in random access memory.

12. (currently amended) The method of recording of claim 7~~11~~, further comprising protecting from being overwritten at one memory location corresponding to at least one of the memory addresses of the selected set. using the index to identify addresses that can be overwritten.

13-16. (canceled)

17. (new) The method of recording of claim 7, wherein looping the memory comprises creating additional compressed frames from subsequent video frames, and overwriting one of the additional compressed frames to the memory at the first location.

18. (new) A method of storing and playing back a video recording having 1 though n variable length video frames, where n is at least 9 comprising:

storing each of the n video frames in n different memory locations, respectively,
using a random access index to store pointers to each of the n memory locations;
using the index to directly locate, access, and playback any individual ones of the n video frames.